

HFUS 3 BOU 182200

FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO

SDF NUMBER 139

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY.

ISSUED 2200Z 18 MAY 1984

IA. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM 17/2100 TO 18/2100Z: SOLAR ACTIVITY HAS BEEN MODERATE THIS PERIOD. A M1 X-RAY FLARE OCCURRED AT 1300 UT. THIS EVENT WAS UNCORRELATED OPTICALLY BUT SURGING AND THE APPEARANCE OF LOOPS NEAR REGION 4492 (S10E73), STRONGLY POINT TO THIS SPOT GROUP AS THE SOURCE. REGION 4492 IS THE RETURN OF OLD REGION 4474, THE SOURCE OF THREE X LEVEL X-RAY FLARES LAST ROTATION. THIS SPOT GROUP IS ALREADY RATED AN E TYPE SPOT GROUP, WITH A BETA MAGNETIC CONFIGURATION, EVEN THOUGH IT HAS JUST ROTATED ONTO THE DISK. REGION 4481 (N08W83) HAS BEEN PRODUCING OPTICAL SUBFLARES AS IT ROTATES OFF THE DISK. THE REMAINDER OF THE SPOT GROUPS ON THE DISK APPEAR STABLE AND UNIMPRESSIVE AT THIS TIME. REGION 4492 IS THE ONLY REGION NUMBERED THIS PERIOD.

IB. SOLAR ACTIVITY FORECAST: SOLAR ACTIVITY SHOULD BE MODERATE THROUGHOUT THE FORECAST PERIOD. REGION 4492 IS THE LIKELY SOURCE OF ANY SIGNIFICANT FLARE ACTIVITY.

IIA. GEOPHYSICAL ACTIVITY SUMMARY FROM 17/2100Z TO 18/2100Z: THE GEOMAGNETIC FIELD HAS BEEN AT UNSETTLED TO ACTIVE LEVELS, AT ALL LATITUDES, THIS PERIOD.

IIB. GEOPHYSICAL ACTIVITY FORECAST: THE GEOMAGNETIC FIELD SHOULD BE AT UNSETTLED TO ACTIVE LEVELS, AT ALL LATITUDES, THROUGHOUT THE FORECAST PERIOD.

III. EVENT PROBABILITIES 19 MAY-21 MAY

CLASS M 70/70/70

CLASS X 05/05/05

PROTON 01/01/01

PCAF GREEN

IV. OTTAWA 10.7 CM FLUX

OBSERVED 18 MAY 129

PREDICTED 19 MAY-21 MAY 132/134/136

90 DAY MEAN 18 MAY 131

V. GEOMAGNETIC A INDICES

OBSERVED AFR/AP 17 MAY 031/026

ESTIMATED AFR/AP 18 MAY 011/015

PREDICTED AFR/AP 19 MAY-21 MAY 008/015-008/015-015/015

SOLTERWARN

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